CyberPower®

Reliability. Quality. Value.

User's Manual

BATTERY PACK (BP48V45ART2U)

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Content

INTRODUCTION 2

OVERVIEW 2
UNPACKING 2

BASIC OPERATION 2

INSTALLATION GUIDE 2
BATTERY CONNECTION TO UPS 4
BATTERY RUNTIME TABLE 4

TROUBLE SHOOTING 4

TECHNICAL SPECIFICATIONS 5

CUSTOMER SERVICE 5

PRODUCT REGISTRATION 5

PRODUCT WARRANTY 6

CONFORMANCE APPROVALS 8

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Introduction

Overview

The CyberPower external battery pack (BP48V45ART2U) supports 45A polarized plugs, and is designed for variety of CyberPower UPS systems. When combining with the UPS, the battery pack provides extended runtime with a 48V DC external connection. Additional parallel-connected battery packs provides the UPS for a longer extended runtime operation.

Unpacking

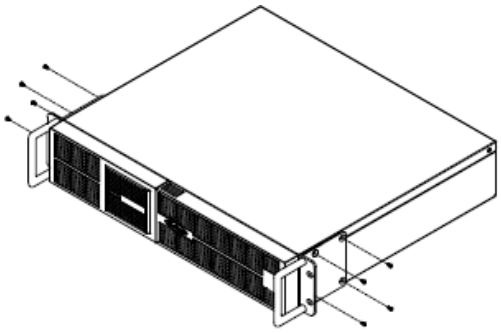
(2) Expansion pieces for mounting stabilizers, (2) Mounting ears, (1) Register card, (1) User's manual

Basic Operation

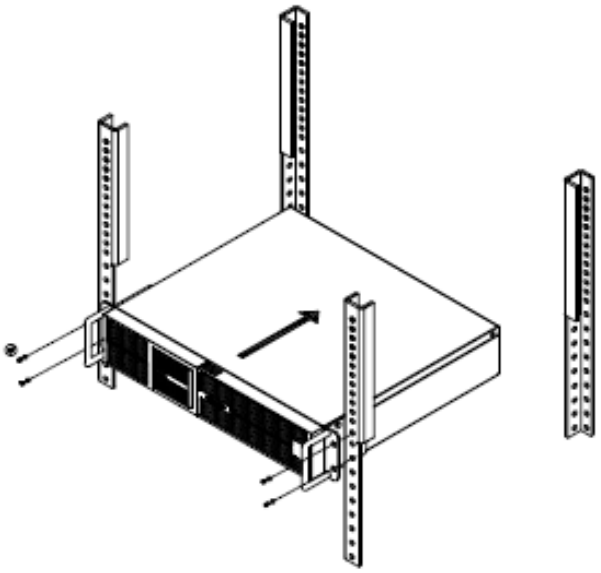
Installation Guide

The UPS is supplied with mounting ears and all the hardware. Follow the below steps to complete the installation.

Step1: Place the UPS in the Racks



1. Attach the mounting ears to each side of the UPS.



2. Use screws to affix the mounting ears to the rack.

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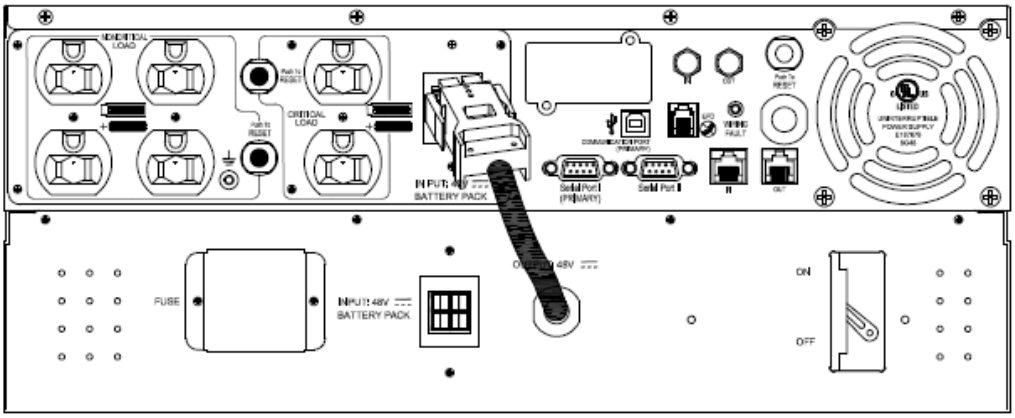
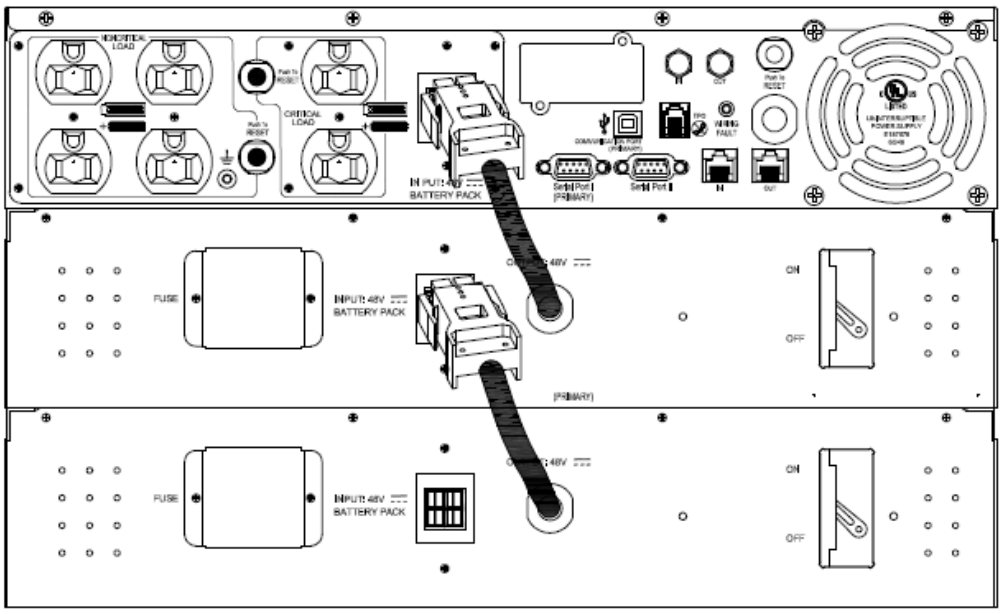
Step2: Connect the External Battery Pack(s)

1 **One Battery Pack**



Be sure the On/Off switch position is “Off”, and then plug the Battery Pack into the UPS. Ensure the color coded Battery Pack connector lines up correctly with the colors in the UPS socket.

2 **Multiple Batteries Packs**



If connecting multiple Battery Packs, simply use the available socket(s) on the Battery Packs to add additional packs.

CAUTION: Do not add more Battery Packs to the UPS than is specified in the Technical Specifications section of the User’s Manual.

Step3: Turn the Battery Pack power switch ON

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Refer to the battery connection diagram:

1. Connect the battery pack's output cord into the UPS's input port.
2. All battery pack module must connect in right type, red to red, black to black, green to green.
3. When connecting with numerous battery packs to extend the battery runtime, link the output plugs of all except the one that connects to the UPS.

CAUTION! Before connecting to the UPS, make sure to turn off the circuit breaker.
CAUTION! Do not disconnect the battery pack when UPS is operating.
CAUTION! Do not connect the battery pack into itself.
CAUTION! Additional battery packs are to be connected in parallel connected, the voltage maintains the same, yet the battery amp-hour capacity depends on the numbers of battery packs in the set up.
CAUTION! Do not connect more than the upper limit of the battery packs to the UPS. (The battery packs limits are stated in the user's manual.)

Battery Connection to UPS

How to set the number of battery packs connected to the UPS?
The UPS must be equipped with the appropriate number of external battery packs. In order to recognize the battery packs, there are two ways to set up the UPS:

- PowerPanel® Business Edition.
- Press the display toggle to set up the correct battery pack numbers.

Battery Runtime Table

Model / Watts		Half load (350W)	Full load (700W)	50W	100W	200W	300W	400W	500W	600W
Number of battery packs	Internal	32 mins	11 mins	3hrs 46mins	2hrs 6mins	58mins	36mins	26mins	18mins	14mins
	+1	2hrs 11mins	50mins	11hrs 21mins	6hrs 54mins	4hrs 17mins	2hrs 36mins	1hr 46mins	1hr 24mins	1hr 7mins
	+2	3hrs 56mins	1 hr 35mins	22hrs 11mins	12hrs 26mins	6hrs 44mins	4hrs 36mins	3hrs 16mins	2hrs 22mins	2hrs 2mins
	+3	5hrs 47mins	2hrs 21mins	33hrs 1min	18hrs	10hrs 01mins	6hrs 34mins	5hrs	3hrs 50mins	3hrs 2mins
	+4	7hrs 38mins	3hrs 08mins	43hrs 51mins	23hrs 34mins	12hrs 45mins	8hrs 55mins	6hrs 20mins	5hrs 1min	4hrs 8mins

Trouble Shooting

Problem	Possible Cause	Solution
The UPS LCD does not perform expected runtime.	Do not set the UPS to recognize the battery pack(s).	By pressing the display toggle to select functions. Then, set up the correct battery pack numbers. The default setting is 0.
The battery pack does not work.	Batteries are not fully charged.	Allow the battery pack to charge for 24 hours. Do not expect full runtime during this initial charge period.
		Specified battery pack models can use AC to shorten charge time.
	The status of circuit breaker is off.	Switch on the circuit breaker.
	The fuse blew.	Contact CyberPower Systems.
		Open the cover on the rear panel and replace a new fuse.

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Technical Specifications

Model	BP48V45ART2U
Voltage	48V
Physical	
Dimensions (in)	2U Rack, 17”x15”x3.5”
Weight (lbs)	62
Battery	
Sealed Maintenance Free Lead Acid Battery	12V/7.0AHX8
Interface	PP45
Environmental	
Operating Temperature	32°F to104°F(0°Cto40°C)
Operating Relative Humidity	0 to 95%
Safety Approvals	
Certifications	FCC Class B certified, cUL, UL1778
RoHS	RoHS Compliant
Warranty	
3 year product warranty, Free Tech Support	

Customer Service

If the battery pack requests further service, please refer to the following information:

1. Call us at (877) 297-6937 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379 or send us an e-mail message at claims@cpsww.com for instructions.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and Request a Claim Number.
3. You must provide a dated Proof-of-Purchase receipt (or other proof of the original purchase) and provide a description of the defect.
4. Pack and ship the product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product.

You must prepay all shipping costs, you are responsible for packaging and shipment, and you must pay the cost of the repair estimate.

Product Registration

CyberPower requests that you complete and return the Warranty Registration Card enclosed with the Product or register the Product at its website (www.cpsww.com) to establish that you are the Initial Customer of the Product, and therefore entitled coverage under the Limited Warranty and the Connected Equipment Guarantee. (Registration is not required for coverage, but note: if you do not register your purchase, you will be required to provide proof of purchase.)

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Product Warranty

Read the following terms and conditions carefully before using the CyberPower BP48V45ART2U (the "Product"). By using the Product you consent to be bound by and become a party to the terms and conditions of this Limited Warranty and Connected Equipment Guarantee (together referred to as this "Warranty"). If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

Warranty Provider
CyberPower Systems (USA), Inc. ("CyberPower") provides this Limited Warranty.

Warranty Coverage
This warranty covers defects in materials and workmanship in the Product under normal use and conditions.

Period of Coverage
Please refer to the Technical Specifications (Warranty section) of the User Manual for period of coverage.

Warranty Transfer
This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

Limitations
The sole and exclusive remedies of the Initial Customer are those provided by this Warranty. CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:

1. Misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, nor for damage while in transit or in storage, nor if there has been improper operation or maintenance, or use with items not designed or intended for use with the Product.

2. Product or Connected Equipment must be properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connectors.

3. Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap.

4. Product and Connected Equipment must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and Connected Equipment.

5. Damage from any circumstance described as excluded above with respect to the Product.

6. Damage from causes other than AC Power Line Transients, spikes, or surges on properly installed, grounded and code-compliant 120 volt power lines in the United States and Canada; transients, surges or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10T Ethernet lines, when properly installed and connected. (This exclusion applies, for example, to fluctuations in data transmission or reception, by CATV or RF transmission or fluctuations, or by transients in such transmission.)

7. Damages from fire, flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.

8. Loss of or damage to data, records, or software or the restoration of data or records, or the reinstallation of software.

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9. The Product was designed to eliminate disrupting and damaging effects of momentary (less than 1ms) voltage spikes or impulses from lightning or other power transients. If it can be shown that a voltage spike lasting longer than 1ms has occurred, the occurrence will be deemed outside the rated capabilities of the Product and the Limited Warranty is void.

10. CyberPower excludes any liability for personal injury under the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for direct, indirect, special, incidental or consequential damages, whether for damage to or loss of property [EXCEPT FOR (AND ONLY FOR) the specific limited agreement of CyberPower to provide certain warranty benefits regarding "Connected Equipment" under this Warranty], loss of profits, business interruption, or loss of information or data. NOTE: Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

11. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would affect operation or safety of any medical or life support device (collectively, "High Risk Activities"). CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities or with aquariums. CyberPower does not authorize use of any Product in any High Risk Activities or with Aquariums. ANY SUCH USE IS IMPROPER AND IS A MISUSE OF THE PRODUCT.

Product Repair/Replacement
CyberPower will inspect and examine the Product. If the Product is defective in material or workmanship, CyberPower will repair or replace it at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required). If it appears that the Product failed to protect any Connected Equipment, CyberPower will also send you forms for making your claim for the Connected Equipment. CyberPower will repair or replace the equipment that was damaged because of the failure of the Product or pay you the fair market value (NOT REPLACEMENT COST) of the equipment at of the time of the damage. CyberPower will use Orion Blue Book, or another a third-party valuation guide, or eBay, craigslist, or other source to establish that amount. CyberPower's maximum liability is limited to the dollar amount as specified in the Technical Specifications (Warranty section) of the User's Manual.

Shipping/Packaging
CyberPower will pay when shipping items to you; you will pay when shipping items to CyberPower.

Filing a Claim
- All claims must be made within ten days of the occurrence.
- Please have the following information available when contacting CyberPower: Product model number, Product serial number, Date of Purchase, and a list of item(s) that you have connected to the CyberPower Product ("Connected Equipment"). Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and Request a Claim Number.
- A dated Proof-of-Purchase receipt (or other proof of the original purchase) must be provided.
- Please be prepared to provide a description of the defect and when it happened (if available).

Fine print
The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded.

CyberPower is the warrantor under this Limited Warranty.

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Conformance Approvals

FCC Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING!! This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: (1) Reorient or relocate the receiving antenna. (2) Increase the separation between the equipment and receiver. (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. (4) Consult the dealer or an experienced radio/TV technician for help. Any special accessories needed for compliance must be specified in the instruction.

The Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.
Cet appareil numerique de la class B respecte toutes les exigencies du Reglement sur le materiel brouilleur du Canada.

Need Additional Help?

Feel free to contact our Tech Support department with installation, troubleshooting, or general product questions.

CyberPower Technical Support
Phone: 1-877-297-6937
Email: tech@cpsww.com
Web: www.CPSww.com
Mail: 4241 12th Avenue E, Suite 400 Shakopee, MN 55379

Hours of Operation:
Monday – Friday, 8:00am – 5:00pm (CST)

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